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Release of an Online FAST Tool to Calculate Crop Insurance Payments

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Permalink: <http://farmdocdaily.illinois.edu/2012/07/release-of-an-online-fast-tool.html>

The 2012 drought raises the possibility of crop insurance payments this year. An online tool for calculating insurance payments from COMBO products is available [here](#). This tool will also calculate crop revenue, as well as sales and losses from any hedging. A similar tool is available in the 2012 Crop Insurance Decision Tool, which is a Microsoft Excel spreadsheet available for download [here](#).

Online Crop Insurance What-If

The image below displays what you will see when you go to the link. In order to use the spreadsheet, click on the box in the upper right corner labeled "Click to Edit". The user then can enter 1) crop insurance input which describes the crop insurance product, 2) harvest yield and price used to calculate insurance payments and crop revenue, and 3) hedging inputs used to calculate hedging gains or losses. In our example for corn, we have an RP policy at 80%, APH of 180 bushels per acre, harvest yield of 100 bushels per acre, harvest price of \$7.50 per bushel, harvest basis of -\$0.20, and 90 bushels per acre hedged at a net cash price of \$5.25 per bushel.

The screenshot shows a Zoho Sheet interface with the following content:

- Header:** Zoho Sheet, New User? Sign Up, Product Links, Themes, Zoho Apps, Feedback.
- Title:** Crop Insurance WhatIf by fast_tools - 24 views.
- Toolbar:** Save To My Account, Print, Export, Embed in Website/Blog, Click to Edit.
- Message:** This spreadsheet is read only. If you need an interactive version of this spreadsheet, press "Click to Edit" button present above.
- FAST Logo:** A large logo for FAST is centered in the spreadsheet.
- Input Tables:**
 - Crop Insurance Input:**

Crop	Corn	Enter Corn or Soybeans
Policy	RP	Enter YP, RPE, or RP. Leave blank for no insurance
Coverage Level	80%	YP Yield Protection
APH Yield	180	RPE Revenue Protection with Harvest Price Exclusion
Yield Guarantee	144.0	RP Revenue Protection
Proj. Price	\$5.68	
 - Harvest Yield and Price:**

Harvest Yield	100	Enter Estimated Harvest Yield
Harvest Price	\$7.50	Enter Estimated Harvest Price
Harvest Basis Level	-\$0.20	Enter Estimated Harvest Basis
 - Hedging:**

Bu/Ac Priced	90	
Net Cash Price Sold at	\$5.25	
- Footnote:**
 - * The Harvest Yield is used in the tables as the midpoint of the range in yields
 - * The Harvest Price is used in the tables as the midpoint of the range in prices. It is used as the Harvest Price for crop insurance as well as in combination with expected basis to compute a cash price for crop revenue
- Table Title:** Crop Insurance Payments and Revenues (Per Acre)

The spreadsheet contains four tables. The first table shows crop insurance payments and revenues, as illustrated below.

Crop Insurance Payments and Revenues (Per Acre)				
Coverage	Crop Insurance	Crop	Hedging	Total
Level	Payments	Revenue	Gain/Loss	Revenue
50%	0	730	-185	546
55%	0	730	-185	546
60%	60	730	-185	606
65%	128	730	-185	673
70%	195	730	-185	741
75%	263	730	-185	808
80%	330	730	-185	876
85%	398	730	-185	943

The above table shows crop insurance payments and revenues for different coverage levels:

1. Crop insurance payments show payments for the product selected. In the example, payments are based on Revenue Protection (RP) crop insurance at an 80% coverage level.
2. Crop revenue equals the harvest yield times the harvest prices minus the harvest basis level. In the example, crop revenue is \$730 per acre which equal 100 bushels of harvest yield x \$7.30 cash price (\$7.50 harvest price – \$.20 harvest basis level).
3. Hedging gain or loss. On each bushel that is priced, a hedging gain or loss is calculated equal to the net cash price sold at minus the cash price (harvest price minus harvest basis level). In the example, hedging gain is -\$2.05 per bushel (\$5.25 net cash price – (\$7.50 harvest price – \$.20 basis).
4. Total revenue is the sum of crop insurance payments plus crop revenue plus hedging gain/loss.

Three remaining tables show sensitivity analysis for crop insurance payments, crop revenues, and hedging gains/losses.

Summary

This tool will be useful in gauging per acre revenue from crop insurance, crop revenue, and marketing activities